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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,531	12/08/2003	William R. Matz	BS030174	3004
7590 04/22/2005 Scott P. Zimmerman P.O. Box 3822 Cary, NC 27519			EXAMINER LAU, HOI CHING	
			ART UNIT 2636	PAPER NUMBER

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,531	<b>Applicant(s)</b> MATZ, WILLIAM R.	
	<b>Examiner</b> Hoi C. Lau	<b>Art Unit</b> 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1 – 12 have been examined.

***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Integration Key Locating Device.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 7, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki. (JP02002230667).

Regarding to Claim 1, Miyazaki discloses a small-sized alarm generator means for engaging a lock (Fig. 1), means for receiving an activation signal (3) from a remote transmitter (8) and response to the activation signal means for emitting an output signal (5) that promotes finding the device when lost (see Abstract).

Regarding to Claim 3, the means for emitting the output signal is a speaker (5).

Regarding to Claim 7, the means for engaging the lock comprises a blade for insertion into a key way of lock (Fig. 1).

Regarding to Claim 8, the means for engaging the lock comprises a male portion for insertion into a female portion of the lock (Fig. 1).

4. Claims 9, 11, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki. (JP02002230667).

Regarding to Claim 9, Miyazaki discloses a hollow body comprising a processor, which control the receiver and audible circuitry (Fig. 3). This alarm generator has a receiver circuitry (6) means for receiving an activation signal from a remote transmitter (8) and the audible circuitry (6) producing an audible indication upon receipt of the activation signal. It is amplifying and emitting the output signal in response to the receiving signal that promotes finding the device when lost.

Regarding to Claim 9, Miyazaki's invention further teaches the hollow body apparatus is integrated with the blade for insertion into the lock (Fig.1). It would have been obvious to one of ordinary skill in the art at the time that the blade is the male portion for insertion into a female portion of the lock.

Regarding to Claim 11, the means for engaging the lock comprises a blade for insertion into a key way of lock (Fig. 1).

Regarding to Claim 13, the means for engaging the lock comprises a male portion for insertion into a female portion of the lock (Fig. 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki (JP02002230667) in view of Rosenthal (U.S. 6,573,833).

Miyazaki teaches a locating lost key device, which meet all the limitation of claims as previously describes at No. 3 and No. 4.

The difference between the reference and the claims are the reference does not teach a device includes a light source, a light emitting diode, and a piezoelectric device.

Rosenthal disclose a lost item finding system included both an audible signal and a flashing light emitting diode as indicator signal which comprises:

A light source which as means of light emitting diode (column 2, lines 57-59, column 4, lines 33-35 and column 10, lines 27-35).

A piezoelectric transducer and including an acoustic cavity, wherein said piezoelectric transducer is disposed on one end of said cavity (column 1, lines 50-67 and column 2, lines 1-15).

A visual circuitry controlled by the processor which the visual circuitry producing a visible indication upon receipt of the activation signal, the visual indication also

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allowing the key to be found when lost (column 3, lines 17-40 and column 4, lines 21-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified locating lost key device of Miyazaki to include a LED and a piezoelectric device because the addition of an LED would provide visual indication means making the device easier to find, and because a piezoelectric transducer is very well known and Miyazaki does not specify the particular type of output device being used. One of skill in the art at the time of applicant's invention include a visual circuitry controlled by the processor because all visual induction control by a processor require any kind of circuitry to control the function. Therefore, it will be simply easy to integrate a LED, piezoelectric device and visual circuitry of Rosenthal with the base of Miyazaki.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki (JP02002230667) in view of Sekine (JP6-84092).

Miyazaki teaches a locating lost key device, which meet all the limitation of claims as previously describes at 3.

The difference between the reference and the claim is the reference fails to teach a device including a liquid crystal display.

Sekine disclose a key chain indicator which comprises:

A integrated key with GPS device which includes a display for display the relationship between the positions calculated by the data processor and a direction

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finder to detect the direction in order to calculate the relationship between the positions (Paragraph 10, line 4 – 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified locating lost key device of Miyazaki to include a display because the addition of a display device would provide visual indication means making the device to output any text or symbolic messages. A liquid crystal display was an old and well-known type of display.

### ***Conclusion***


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu (U.S. 6,473,022) teaches a mechanical and remote control key includes a hollow head comprised of a key and the remoter controller. Matters et al (U.S. 6,380,842) shows an electronic key which includes a transmitter/receiver and LED display. Benvenuti (U.S. 6,166,652) shows a system for locating lost keys includes a sound generator that generates a sound of sufficient volume to facilitate locating the device from a distance. It has included a miniature flashlight as part of the feature.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoi C. Lau whose telephone number is (571)272-8547. The examiner can normally be reached on M- F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571)272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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